Rangeland Resources

Regulatory Framework

The Malheur National Forest Land and Resource Management (USDA Forest Service, 1990) both allows for and encourages grazing. Stated goals (FLMP IV-2) include:

- Provide a sustained production of palatable forage for grazing by domestic livestock and dependent wildlife species (FLMP, 1990).
- Manage rangelands to meet the needs of other resources and uses at a level responsive to site-specific objectives.
- Permit livestock use on suitable range when the permittee manages livestock using prescribed practices.

This analysis adheres to the post-fire interim grazing guidelines issued for the Malheur National Forest by the Forest Supervisor on December 2, 2003. Some of the items considered in this policy are: amount of acres; fire intensity; and vegetation community condition (pre and post fire). Monitoring will be done on an annual basis to determine when grazing will be allowed in areas that were burned based on the parameters of the policy.

Analysis Methods

The area impacted by the fire was summarized as it relates to the whole of the allotments impacted. The project itself will not prevent use of the allotments.

Existing Condition

Livestock grazing has been a part of the landscape of the Malheur National Forest since the 1860's when the first miners and homesteaders entered this area. Allotments within the planning area have been grazed by both domestic cattle and sheep, becoming almost exclusively grazed by cattle in the past 40 years. Although livestock grazing on National Forest System lands has decreased since the early 1900s, the ranching industry remains an important part of the Grant County economy.

Early grazing was essentially unregulated and resulted in resource impacts, some of which are still observable today. During the middle part of the century, the Forest Service took significant action to regulate livestock numbers, and to establish workable grazing seasons and allotments. In the latter part of the century, emphasis shifted to development of range management systems and regulation of effects on specific resources. During the past twenty years or so, emphasis has been on protection and management of riparian and aquatic habitats.

According to Area Ecologist, Charlie Johnson, there has been a marked improvement on most rangelands on the Malheur National Forest since the 1970s. However, the impacts at the turn of the century and continuing into the 1950s were sometimes too severe for the dry, warm, non-forested communities to sustain. The results were degraded rangeland ecosystems with little opportunity (time) for natural rectification (reasserting of balance) for the natural community. He notes the improvements since the 1970s were mainly where rotational grazing (deferred or rest) were implemented, generally with added fencing.

Charlie Johnson's notes from the mid 1990s characterize the vegetation within the planning area as outside the normal range of variation. He asserts key factors influencing this are severe disturbance and a lack of maintenance disturbance processes. Because fire has such a profound influence on the ecosystem the curtailment of fire's natural cycle combined with livestock grazing has significantly contributed to the ecosystems being outside natural variation.

Although his report was generated for other reasons, he adds that present health of vegetation within allotments also relates to the incursions by administrative projects to harvest trees. The removal of larger trees coupled with removal of fire from the ecosystem has led to promotion of later seral tree species when fire seral tree species were favored in the removal. These plant communities are now far outside the natural range of variation, which affects the overall rangeland/allotment health and production. (Charles G. Johnson, Jr., Summary Report for Rangeland Health on Selected Allotments, 6/6/95)

The Malheur National Forest Land and Resource Management (USDA Forest Service 1990) both allows for and encourages grazing. Stated goals (FLMP IV-2) include;

- Provide a sustained production of palatable forage for grazing by domestic livestock and dependent wildlife species (FLMP, 1990).
- Manage rangelands to meet the needs of other resources and uses at a level, which is responsive to site-specific objectives.
- Permit livestock use on suitable range when the permittee manages livestock using prescribed practices.

Forage species (grasses, grass likes and forbs) recovery response time is often very rapid to change, such as green up the year following a fire. Because of this, short-term effects are generally under five years and long-term effects are over five years.

In areas burned at high intensity, the capacity for the native vegetation to provide cover of the soil may have been diminished. Thus, burned areas provide opportunities for invasive plants to become established quickly because of disturbed soil, release of nutrients, and lack of competition. Noxious weeds could also have been introduced to the areas during fire suppression as there were no wash stations at the fire for vehicles or equipment.

Fire Impacts to Allotments

The Easy Fire impacted two grazing allotments. They are the Reynolds Creek and Sullens C&H allotments. The fire impacted approximately 1,372 acres in the Reynolds Creek allotment and about 4,467 acres in the Sullens C&H allotment (refer to Table R-1). Of those acres burned about 1,112 acres were identified as receiving a moderate to high severity burn in the Reynolds Creek allotment and about 3,761 acres in the Sullens C&H allotment.

The Reynolds Creek Allotment is permitted for use by 166 cow/calf pairs for a period of June 1 through September 18 under a two unit deferred rotation system. The Reynolds Unit was partially burned. This unit is not planned for grazing during the first two growing seasons. The boundary fence needs to be repaired before livestock can be placed on the unit.

The Sullens Allotment is currently vacant. This allotment is under analysis and will also be in compliance with the Forest's Post-fire Interim Grazing Guidelines.

Table R-1: Summary of Burned Acres by Unit

Allotment	Pasture Name	Acres by Burn Severity					
		Unburned	Light	Moderate	Partial	Severe	Grand Total
Reynolds Creek	Reynolds Creek	38	222	498		614	1372
Sullens C & H	Bridge Creek	119	527	1373	61	2388	4467
Grand Total		157	749	1870	61	3002	5839

The Easy Fire destroyed an estimated 3.05 miles of boundary and interior fences between Reynolds and Bridge Creek Units.

Those fences needed for livestock control that were damaged by the fire will need to be reconstructed prior to the resumption of grazing on the burned areas of the allotments.

Environmental Consequences

Alternative 1 (No Action)

Direct and Indirect Effects

Forage Availability

In Alternative 1, short term effects would be increased forage availability as grasses and forbs would have little competition from shrubs and trees for a number of years.

The long-term effects, however, would be decreased forage availability as snags fall and material accumulates on the forest floor, inhibiting the growth of ground vegetation.

Distribution of Livestock

In the long term (10 –30 years), as the large quantity of snags fall the difficulty in getting proper livestock distribution will increase. There would be decreased distribution of cattle through the units, resulting in an increased possibility of overuse of forage in some areas, and no use in others. As debris accumulates, access to water sources could be impaired further disrupting livestock distribution patterns.

Range Improvements

Under Alternative 1, No Action, existing spring developments and fence lines will require more intensive maintenance, as falling snags and accumulating debris will likely cause damage to the structures and impede fence rights-of-way and routes to water sources.

Permittee/Range Management Access

Under the no action alternative there would be no additional closures of roads. This would allow current road access to spring developments, salt grounds and fence lines.

The eventual accumulation of fallen debris under the no action alternative would result in impediment of horseback riders in moving cattle, as well as ATV's used to inspect and maintain fence lines and spring developments away from established roads.

In the long term as forage becomes less available the number of permitted livestock or period of use may need to be reduced.

Cumulative Effects

In review of Easy Cumulative Effects List shows past, present and foreseeable actions that could affect the range resource included in the following: Treatment of noxious weeds will help maintain the rangeland forage resource. Riparian planting may affect livestock grazing if these areas are fenced out. Future/additional hardwood fencing will exclude additional small parcels within the allotments reducing the total available forage for livestock to a minor degree. Locations of fences may affect control of livestock and increase utilization of forage near the exclosures sites. All other ongoing and future actions in the Easy Cumulative Effects List would not affect range.

Alternative 2

Direct and Indirect Effects

With the implementation of Alternative 2, during the recovery period, grazing management techniques to achieve desired use levels would be implemented. This could include adjusting location of livestock turnout, placement of salt blocks or other management practices that would promote use by livestock in those portions of the pasture away from the fire. Specific grazing management adjustments would be developed in coordination with the allotment permittee and incorporated into the annual plan.

Forage Availability

Alternative 2 will promote increased forage availability in the short term, as grasses and forbs will have little competition from shrubs and trees for water, sunlight and soil nutrients for a number of years.

Forage will be more readily available in the long term as salvage harvest opens up the canopy cover, and reduces the number of snags that will fall and accumulate on the forest floor. Fuels treatment associated with these alternatives will reduce the accumulation of large material on the ground, which will also increase forage availability.

Reforestation under Alternative 2 would impair forage availability to some extent, as the young trees become competition for grasses and forbs. Management of the planted trees will at some point include thinning and commercial harvest, which will open up the canopy and allow more ground vegetation growth in the long term.

Distribution of Livestock

Harvest and fuel treatment under Alternative 2 would result in a reduction in the potential abundance of downed logs that would, over time, present physical difficulties to livestock grazing operations. Fewer impediments to travel from large log accumulations on the ground would facilitate cattle movement, and thus distribution, over the allotment, resulting in more even utilization of forage resources. The expected reduction in large materials on the ground would allow more open travel ways for livestock to salt and water sources, further enhancing livestock distribution patterns.

Range Improvements

Under Alternative 2, reduction in the potential for falling snags will lessen the chance of damage to fence lines and spring troughs, resulting in standard maintenance rather than the excessive repairs expected from large numbers of snags. Fuels treatment will likely provide more open access along fence rights-of-way and routes to water sources, to properly utilize these structures.

Permittee/Range Management Access

The road closure within the fire area will limit access to some salt grounds, springs and fences which otherwise could be accessed by vehicle. However, horseback or ATV access along fence lines and to salt grounds and spring developments away from roads will be enhanced by the reduction in the quantity of snags and lesser accumulations of large materials on the ground.

Access by horse or ATV will be improved under Alternative 2. In general most permittee or range management work is accomplished by either of these methods, so the road closure is not likely to be a hindrance.

Cumulative Effects

In review of Easy Cumulative Effects List shows past, present and foreseeable actions that could affect the range resource included in the following: Treatment of noxious weeds will help maintain the rangeland forage resource. Riparian planting may affect livestock grazing if these areas are fenced out. Future/additional hardwood fencing will exclude additional small parcels within the allotments reducing the total available forage for livestock to a minor degree. Locations of fences may affect control of livestock and increase utilization of forage near the exclosures sites. Recreational use of the area could cause dispersal of uncontrolled livestock via open gates, and recreational livestock may use some forage. All other ongoing and future actions in the Easy Cumulative Effects List would not affect range.

Alternatives 3 and 4

Direct and indirect effects

With the implementation of Alternative 3 or 4, during the recovery period, grazing management techniques to achieve desired use levels would be implemented. This could include adjusting location of livestock turnout, placement of salt blocks or other management practices that would promote use by livestock in those portions of the pasture away from the fire. Specific grazing management adjustments would be developed in coordination with the allotment permittee and incorporated into the annual plan.

Forage Availability

Alternatives 3 and 4 will promote increased forage availability in the short term. Grasses and forbs will have little competition from shrubs and trees for water, sunlight and soil nutrients

for a number of years. In the long term fallen snags and material accumulation on the forest floor will inhibit the growth of ground vegetation.

Reforestation under Alternatives 3 and 4 would impair forage availability as the young trees become competition for grasses and forbs. Management of the planted trees would, at some point, open up the canopy and allow more ground vegetation growth in the long term, where accumulated fuels did not impede the growth of ground vegetation.

Distribution of Livestock

The short-term reduction of fuel loads under this alternative would result in fewer impediments to travel from fuels accumulation on the ground. This would facilitate cattle movement, and thus distribution over the allotment, resulting in more even utilization of forage resources, (but less so than in Alternative 2).

In the long term (10 –30 years), as the large quantity of snags fall, the difficulty in getting proper livestock distribution will increase. There would be decreased distribution of cattle through the units, resulting in an increased possibility of overuse of forage in some areas, and no use in others. As debris accumulates, the access to water sources could be impaired. This would further disrupt livestock distribution patterns.

Range Improvements

Under Alternatives 3 and 4, existing spring developments and fence lines will require more intensive maintenance. Falling snags and accumulating debris will likely cause damage to the structures and impede fence rights-of-way and routes to water sources.

Permittee/Range Management Access

Under Alternative 3 and 4, horseback or ATV access along fence lines and to salt grounds and spring developments away from roads will be enhanced for the short term, by increased openness of stands after the fire.

In the long term, the eventual accumulation of fallen snags under Alternative 3 and 4 would result in impediment of horseback riders in moving cattle, as well as the use of horses or ATVs to inspect and maintain fence lines and spring developments away from established roads. In the long term Alternative 4 will impact livestock distribution more than Alternative 3 because Alternative 4 retains 13 snag per acre, whereas Alternative 3 leaves 0 snags per acre (except for down wood).

Access by horse or ATV will be improved under Alternatives 3 and 4. In general most permittee or range management work is accomplished by either of these methods, so the road closure not likely to be a hindrance.

Cumulative Effects

In review of Easy Cumulative Effects List shows past, present and foreseeable actions that could affect the range resource included in the following: Treatment of noxious weeds will help maintain the rangeland forage resource. Riparian planting may affect livestock grazing if these areas are fenced out. Future/additional hardwood fencing will exclude additional

small parcels within the allotments reducing the total available forage for livestock to a minor degree. Locations of fences may affect control of livestock and increase utilization of forage near the exclosures sites. .

Alternative 5

Direct and Indirect Effects

With the implementation of Alternative 5, during the recovery period, grazing management techniques to achieve desired use levels would be implemented. This could include adjusting location of livestock turnout, placement of salt blocks or other management practices that would promote use by livestock in those portions of the pasture away from the fire. Specific grazing management adjustments would be developed in coordination with the allotment permittee and incorporated into the annual plan.

Forage Availability

Alternative 5 will promote increased forage availability in the short term, as grasses and forbs will have little competition from shrubs and trees for water, sunlight and soil nutrients for a number of years.

Forage will be more readily available in the long term as salvage harvest opens up the canopy cover, and reduces the number of snags that will fall and accumulate on the forest floor. Fuels treatment associated with these alternatives will reduce the accumulation of large material on the ground, which will also increase forage availability.

Reforestation under Alternative 5 would impair forage availability to some extent, as the young trees become competition for grasses and forbs. Management of the planted trees will at some point include thinning and commercial harvest, which will open up the canopy and allow more ground vegetation growth in the long term.

Distribution of Livestock

Fuel treatment under Alternative 5 would result in a reduction in the potential abundance of smaller diameter downed logs that would, over time, present physical difficulties to livestock grazing operations. However, larger size diameter logs would become impediments to travel from large log accumulations on the ground would deter cattle movement, and thus distribution, over the allotment, resulting in a more uneven utilization of forage resources. The increase of large materials on the ground would restrict open travel ways for livestock to salt and water sources, further restricting livestock distribution patterns.

Range Improvements

Under Alternative 5, increase in the potential for falling snags will increase the chance of damage to fence lines and spring troughs, resulting in excessive maintenance rather than the standard repairs expected from a lower number of snags. Fuels treatment will likely provide more open access along fence rights-of-way and routes to water sources, to properly utilize these structures.

Permittee/Range Management Access

The road closure within the fire area will limit access to some salt grounds, springs and fences which otherwise could be accessed by vehicle. However, horseback or ATV access along fence lines and to salt grounds and spring developments away from roads will be enhanced by the reduction in the quantity of snags and lesser accumulations of large materials on the ground.

Access by horse or ATV will be improved under Alternative 5. In general most permittee or range management work is accomplished by either of these methods, so the road closure is not likely to be a hindrance.

Cumulative Effects

In review of Easy Cumulative Effects List shows past, present and foreseeable actions that could affect the range resource included in the following: Treatment of noxious weeds will help maintain the rangeland forage resource. Riparian planting may affect livestock grazing if these areas are fenced out. Future/additional hardwood fencing will exclude additional small parcels within the allotments reducing the total available forage for livestock to a minor degree. Locations of fences may affect control of livestock and increase utilization of forage near the exclosures sites.

Consistency With Direction and Regulations

As previously discussed, none of alternatives will not prevent grazing of the allotments. The effects of the wildfire will require a cessation of grazing for a period to allow recovery of herbaceous vegetation. The units that were burned are in an Vacant and/or inactive allotments. The alternatives are consistent with guidelines for range set forth in the Forest Plan.

Irreversible and Irretrievable Effects

The alternatives as described will not result in any irreversible or irretrievable effects to the range resource.